

AMENDMENTS TO THE CLAIMS

Please amend claims 8-9, 20 and 27 as follows:

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (currently amended) A rotary vane compressor which exhibits reduced sound of operation and comprises:

a motor;
a non-vented housing surrounding said motor;
a non-vented back or closure secured to one end of said housing;
a drive shaft extending from and operatively associated with said motor;
at least one deep groove ball bearing for supporting said drive shaft and having a sound dampening grease sealed within said bearing;
a rotor with vane receiving slots coupled to said drive shaft for rotation therewith;

a body which defines a cavity within which said rotor rotates, said body fabricated of a first sound dampening material;

a non-vented shroud which surrounds the body, said shroud comprising laminated layers of at least one layer of metal and at least one lay layer of a second sound dampening material;

a front plate engaging the body in defining a pair of air conducting chambers; and

a muffler box which engages the front plate and defines an inlet port and an outlet port, each of which communicates with one of said chambers.

9. (currently amended) A rotary vane compressor as in claim 8 wherein the an angular relation between a centerline of a vane receiving slot, and a line passing from an axial center of the rotor and a center of a vane receiving slot opening thereof at a periphery of the rotor ranges from about 23° to about 25°.

10. (previously presented) A rotary vane compressor as in claim 9 wherein the angular relation is about 24°.

11. (previously presented) A rotary vane compressor as in claim 9 wherein each vane weighs about 6.75 grams.

12. (previously presented) A rotary vane compressor as in claim 8 wherein said first sound dampening material is grey iron.

13. (previously presented) A rotary vane compressor as in claim 8 wherein said muffler box is fabricated of grey iron.

14. (previously presented) A rotary vane compressor as in claim 8 wherein said second sound dampening material is acrylic.

15. (previously presented) A rotary vane compressor as in claim 8 wherein said body is substantially circular and has an outer radius of no less than about 2 6 inches.

16. (previously presented) A rotary vane compressor as in claim 8 wherein said body weighs no less than about 4.63 lbs.

17. (previously presented) A rotary vane compressor as in claim 8 wherein said motor housing is no more than about 5.22 inches in length.

18. (previously presented) A rotary vane compressor as in claim 8 wherein a rear plate is coupled to said motor housing for additional support of said drive shaft

19. (previously presented) A rotary vane compressor as in claim 18 wherein an inlet ring engages said motor housing and said rear plate, said inlet ring fabricated of crushable steel and sealing against both the motor housing and the rear plate

20 (previously presented) A rotary vane compressor which exhibits reduced sound of operation and comprises:

a motor;
a non-vented housing surrounding said motor;
a non-vented back or closure secured to one end of said housing;
a drive shaft extending from and operatively associated with said motor;
at least one deep groove ball bearing for supporting said drive shaft and having a sound dampening grease sealed within said bearing;

a rotor with vane receiving slots coupled to said drive shaft for rotation therewith, wherein the an angular relation between the centerline of a vane receiving slot, and a line passing through the center of the rotor and the center of the vane receiving slot opening thereof at the periphery of the rotor is from about 23° to about 25°;

a body which defines a cavity within which said rotor rotates, said body fabricated of grey iron and weighing no less than about 4.63 lbs;

a non-vented shroud which surrounds the body, said shroud comprising laminated layers of at least one layer of metal and at least one lay layer of a sound dampening material;

a front plate engaging the body in defining a pair of air conducting chambers; and

a muffler box which engages the front plate and defines an inlet port and an outlet port, each of which communicates with one of said chambers.

21. (previously presented) A rotary vane compressor as in claim 20 wherein each vane weighs about 6.75 grams

22. (previously presented) A rotary vane compressor as in claim 20 wherein said muffler box is fabricated of grey iron.

23. (previously presented) A rotary vane compressor as in claim 20 wherein said sound dampening material is acrylic

24. (previously presented) A rotary vane compressor as in claim 20 wherein said body is substantially circular and has an outer radius of no less than about 2.6 inches.

25. (previously presented) A rotary vane compressor as in claim 20 wherein said motor housing is no more than about 5.22 inches in length

26. (previously presented) A rotary vane compressor as in claim 20 wherein a rear plate is coupled to the motor housing through an inlet ring for additional support of said drive shaft, said inlet ring fabricated of crushable steel and sealing against both the motor housing and the rear plate.

27. (currently amended) A rotary vane compressor which exhibits reduced sound of operation and comprises:

a motor;

a non-vented housing surrounding said motor;

a non-vented back or closure secured to one end of said housing;

a rear plate coupled to said motor housing through an inlet ring for additional support of said drive shaft, said inlet ring fabricated of crushable steel and sealing against both the motor housing and the rear plate;

a drive shaft extending from and operatively associated with said motor;

at least one deep groove ball bearing for supporting said drive shaft and having a sound dampening grease sealed within said bearing;

a rotor with vane receiving slots coupled to said drive shaft for rotation therewith, wherein the an angular relation between the centerline of a vane receiving slot and a line passing through the center of the rotor and the center of the vane receiving slot opening thereof at the periphery of the rotor is from about 23° to about 25°;

a body which defines a cavity within which said rotor rotates, said body fabricated of grey iron and weighing no less than about 4 63 lbs;

a non-vented shroud which surrounds the body, said shroud comprising laminated layers of at least one layer of metal and at least one lay layer of a sound dampening material;

a front plate engaging the body in defining a pair of air conducting chambers; and

a muffler box which engages the front plate and defines an inlet port and an outlet port, each of which communicates with one of said chambers.